

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
27 January 2005 (27.01.2005)

PCT

(10) International Publication Number
WO 2005/007733 A1

(51) International Patent Classification⁷: **C08K 3/00**,
3/16, 3/22, 3/36, 5/06, 5/098, 9/06, C09C 3/08, C09K
3/16, C08L 71/02

(74) Agent: **HOOGENDAM, G., C.**; DSM Intellectual Prop-
erty, P.O. Box 9, NL-6160 MA Geleen (NL).

(21) International Application Number:
PCT/NL2004/000533

(22) International Filing Date: 23 July 2004 (23.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
JP2003-278211 23 July 2003 (23.07.2003) JP

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicants (*for all designated States except US*): **DSM IP ASSETS B.V.** [NL/NL]; Het Overloon 1, NL-6411 TE Heerlen (NL). **JSR JAPAN SYNTHETIC RUBBER CO, LTD.** [JP/JP]; 5-6-10, Tsukiji Chuo-ku, Tokyo (JP). **JAPAN FINE COATINGS CO., LTD.** [JP/JP]; 57-1, Sawabe, Niiharimura, Niihari-gun, Ibaraki 300-4104 (JP).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **SHINOHARA, Noriyasu** [JP/JP]; 5-6-10, Tsukiji Chuo-ku, Tokyo 104-8410 (JP). **MANO, Hiroyuki** [JP/JP]; 5-6-10, Tsukiji Chuo-ku, Tokyo 104-8410 (JP). **TANABE, Takayoshi** [JP/JP]; 5-6-10, Tsukiji Chuo-ku, Tokyo 104-8410 (JP). **SOUTHWELL, John, Edmond** [US/US]; 735 Pleasant Street, Elgin, IL 60137 (US). **TRONCHE, Christopher, Frederic** [FR/US]; 731 Kemah Court, Schaumburg, IL 60193 (US).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **RADIATION-CURABLE RESIN COMPOSITION, CURED FILM OF THE COMPOSITION, AND LAMINATE**

(57) Abstract: The present invention relates to a radiation-curable resin composition which produces a cured film having low surface resistivity and high transparency, a cured film of the composition, and a laminate including a layer of the cured film. The laminate of the present invention is suitably used as a hard coat material for preventing scratches or stains on a plastic optical part, touch panel, film-type liquid crystal element, plastic container, or flooring material, wall material, or artificial marble as an architectural interior finish, adhesive and sealing material for various substrates, vehicle for printing ink, or the like.

WO 2005/007733 A1